## Abstract

A heat exchanger, comprising a shell designed as a pressure vessel, provided with shell-sided supply and discharge means with which the shell can be flowed through with a first medium under pressure. The heat exchanger further comprises a nest of tubes extending at least partly within the shell, provided with tube-sided supply and discharge means with which the tubes from the nest can be flowed through with a second medium in heat exchanging contact with the first medium under pressure. The individual tubes of the nest are each included with a supply and a discharge side in tube bores extending substantially transversely to the plane of a tube plate included in the shell. The heat exchanger has the special feature that the tubes are connected with the tube-sided supply and discharge means via connecting channels located in the plane of the tube plate and crossing the tube holes.